

## APPENDIX H

## Glossary of Terms

**AB 84.** The original bill number for the legislation that required Project Study Reports (PSRs) and the development of Future Project Development lists by the counties.

**Air Quality Attainment Plan.** The plan for attainment of state air quality standards, as required by the California Clean Air Act of 1988. It is adopted by air quality districts and subject to approval by the State Air Resources Board.

**Association of Bay Area Governments (ABAG).** The regional agency that is responsible for regional planning other than for transportation. ABAG publishes forecasts of projected growth for the region.

**Average Daily Traffic (ADT).** The average number of vehicles passing a specified point during a 24-hour period.

**Bay Area Air Quality Management District (BAAQMD).** The regional agency created by the state legislature for the Bay Area air basin (Alameda, Contra Costa, western Solano, southern Sonoma, Marin, Napa, San Francisco, San Mateo, Santa Clara counties) that develops, in conjunction with MTC and ABAG, the state and federal air quality plans for the region. BAAQMD has an active role in approving the TCM (see definition below) plan for the region, as well as in controlling stationary and indirect sources of air pollution.

**Bid targets.** Based on the county minimum formula, each county is limited in the amount of funds that can be requested from the state in a given STIP cycle. This limit is called the bid target. In a multi-county region such as MTC, bid targets can be pooled to give additional flexibility at the regional level. MTC also uses bid targets for the federal Surface Transportation Program.

**California Transportation Commission (CTC).** A body appointed by the Governor and confirmed by the legislature that considers Regional Transportation Improvement Programs (RTIPs) and the PSTIP (see definitions below) and then includes transportation projects from these programs into the State Transportation Improvement Program (STIP). This qualifies the projects for state funding. The CTC also has financial oversight over the major programs authorized by Propositions 111 and 108.

**Caltrans — The California State Department of Transportation.** Responsible, as the owner/operator of the state highway system, for its safe operation and maintenance. Proposes projects for Intercity Rail, Interregional Roads, and soundwalls in the PSTIP (see definition below). Also responsible for the HSOPP (see definition below), Toll Bridge, and Aeronautics programs. The TSM and State/Local

Partnership Programs are administered by Caltrans. Caltrans is the implementing agency for most state highway projects, regardless of program, and for the Intercity Rail program.

**Capital Improvement Program (CIP).** As used in this document: A seven-year program of projects to maintain or improve the traffic level of service and performance measures developed by the CMP, and to mitigate regional transportation impacts identified by the CMP Land Use Analysis Program, which conforms to transportation-related vehicle emissions air quality mitigation measures.

**Capital Outlay.** "All money allocated by the CTC from the State Highway, Account, and the net revenues from the passenger rail transportation Bond Fund for streets, highways, guideways, and rail, but not including allocations or expenditures for projects for maintenance, traffic system management, intercity rail, and the state-local partnership program, which are expended for construction, including the acquisition of rights-of-way, reconstruction, and construction engineering." (Streets and Highways Code 188.)

**Capital Priorities.** A process used by MTC to evaluate and prioritize transit projects in the region. All sources of transit funding, including FTA grants, state programs, and other sources are considered. This process involves all of the transit operators in the region, including bus, rail, and ferries.

**Congestion Management Agency (CMA).** The agency responsible for developing the Congestion Management Program and coordinating and monitoring its implementation.

**Congestion Management Program (CMP).** A multi-jurisdictional program to reduce traffic congestion. Required of every county in California with an urbanized area as defined by the Census Bureau (at least 50,000 people).

**Council of Governments.** A voluntary consortium of local government representatives, from contiguous communities, meeting on a regular basis, and formed to cooperate on common planning and solve common development problems of their area. COGs can function as the RTPAs and MPOs in urbanized areas.

**County Minimums.** Instituted in 1983 by SB 215 (Foran), the county minimum represents the minimum share of programming each county should receive. Under this statute (Section 188.8 of the Streets and Highways Code), 70 percent of the capital outlay (defined above) funds must be expended in each county according to a formula based 75 percent on county population and 25 percent on state highway miles in the county. The county minimum calculated over a fixed five year period called a quinquennium.

**Database.** 1) A collection of data from which information is derived and from which decisions can be made; and 2) A non-redundant collection of data items that can be processed by one or more computer applications.

**Federal Highway Administration (FHWA).** A division of the U.S. Department of Transportation, established to ensure development of an effective national road and highway transportation system. It assists states in constructing highways and roads, and provides financial aid at the local level.

**Flexible Congestion Relief (FCR).** One of the state's funding programs for local or regional transportation projects that will reduce congestion. State highway projects, local roads, and rail guideway projects are all eligible.

**Fund Estimate.** The STEP cycle begins with the development of the Fund Estimate, which compares existing commitments against total estimated revenue expected from state and federal sources. Caltrans estimates state and federal funds "reasonably expected" in annual increments for 7 years (the STIP period). The calculation of existing capital program commitments is based on Caltrans' Project Delivery Report (see definition below), while non-capital expenditures of operation and administration costs are estimated based on current spending and projected needs. This comparison of revenues to commitments results in an estimate of total uncommitted funds that are available for programming and which are then prorated to each program category. The Fund Estimate is required by law to be submitted by 7/15 of odd-numbered years and to be adopted by the CTC by 8/15 of odd numbered years. CTC adopts a policy, known as the "Fund Estimate Methodology" that guides Caltrans in formulating the Fund Estimate.

**High Occupancy Vehicle Lane (HOV).** A lane of freeway reserved for the use of vehicles with more than a preset number of occupants; such vehicles often include buses, taxis and carpools.

**Indirect Source Control Measure.** The Federal Clean Air Act defines indirect source as "...a facility, building, structure, installation, real property, road or highway which attracts, or may attract, mobile sources of pollution." An indirect source control measure is a rule or ordinance established to reduce the mobile source emissions associated with specific activity centers such as those noted above.

**Interregional Road System (IRRS).** On February 1, 1990, Caltrans submitted a plan to the state legislature that identified a set of projects that "will provide the most adequate interregional road system to all economic centers in the State." Statute defines eligible routes that were included, and specified that these be located outside the boundaries of urbanized areas of over 50,000 population, "except as necessary to provide connection for continuation of the routes within urban areas." From this plan, Caltrans includes projects, consistent with the Fund estimate, in its PSTIP to the CTC for programming in the STIP.

**Level of Service (LOS).** A qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

**Metropolitan Transportation Commission (MTC).** Created by the state legislature in 1970 to prepare a Regional Transportation Plan for the nine counties of the Bay Area. Other important responsibilities

include: approving transportation projects that receive state or federal funding, allocating several sources of funds for transit operations, evaluating the performance of the transportation system and the provision of transportation service, promoting and setting guidelines for transit systems coordination, and advocating adequate transportation funding. MTC consists of 16 voting members, including one member from ABAG, and one member from the Bay Conservation and Development Commission. MTC also includes 2 non-voting members, from the state and federal transportation agencies.

**Metropolitan Transportation System** . A regional, multi-modal transportation system defined as part of MTC's RTP (see definition below). Emphasizes a balanced strategy of highway, arterial, and transit capital investments and operational improvements to manage congestion projected over the next 20 years.

**Model: Gravity.** A mathematical trip distribution model that is based on the premise that the amount of travel between two zones is proportional to the amount of activity in each of the two zones and inversely proportional to the impedance to travel between the two zones. In other words, trips produced in any given area will distribute themselves in accordance with the accessibility of other areas and the opportunities.

**Model: Land Use.** A model used to predict the future spatial allocation of urban activities (land use), given total regional growth, the future transportation system, and other factors.

**Model: Mode Choice.** A model used to forecast the proportion of total person trips on each of the available transportation modes.

**Model: Regional Growth.** A model used to estimate land uses in a region.

**Model: Travel Demand.** A mathematical equation or graphic technique used to simulate traffic movements, particularly those in urban areas or on a freeway.

**North/South Split.** State law (Section 188 of the Streets and Highway Code) requires that programming be balanced so that 60 percent of the capital outlay (see definition above) is spent in the 11 Southern counties, and 40 percent is spent in the North (45 counties). This balance must occur for the period July 1, 1989 to June 30, 1993, and for each subsequent five year period. This rule has a serious impact on the type of projects programmed in the North or the South. Rehabilitation and safety funds have historically tended to be spent roughly 60 percent in the north, and only 40 percent in the South, due to worse weather conditions and more mountainous roads in the North. In addition, engineering costs are relatively higher in the North than in the South. Furthermore, Caltrans' project support for locally funded projects, of which the North has a disproportionate share, is also included. Thus, funds for capacity increasing projects have historically been weighted towards the South, so that the overall balance remains 60 percent/40 percent.

**Obligation.** An action by an administrative agency approving the spending of money for a specific purpose to a specific grant recipient.

**Pavement Management System (PMS).** Required by Section 2108.1 of the Streets and Highways Code, any jurisdiction that wishes to qualify for funding under the STIP must have a PMS that is in conformance with the criteria adopted by the Joint City/County/State Cooperation Committee. At a minimum, the PMS must contain:

- An inventory of the arterial and collector routes in the jurisdiction that is reviewed and updated at least biennially;
- An assessment of pavement condition for all routes in the system, updated biennially; Identification of all sections of pavement needing rehabilitation or replacement; and
- Determination of budget needs for rehabilitation or replacement of deficient sections of pavement for the current biennial period, and for the following biennial period.

Certification is done by implementing jurisdiction and submittal to MTC. MTC then makes a finding of agreement with the certification and transmits the certification to the CTC with the RTIP.

**Peak (Peak Period, Rush Hours).** 1) The period during which the maximum amount of travel occurs. It may be specified as the morning (A.M.) or afternoon or evening (P.M.). 2) The period when demand for transportation service is the heaviest.

**Principal Arterial.** The functional classification system at the federal level defines principal arterials for rural areas, urbanized areas, and small urban areas. (Note: other definitions of principal arterials exist). In urbanized areas, the principal arterial system can be identified as unusually significant to the area in which it lies in terms of the nature and composition of travel. Principal arterials derive their importance from service to rural oriented traffic, but equally or even more importantly, from service for major movements within the urbanized area. The principal arterial system should carry the major portion of trips entering and leaving the urban area, as well as the majority of through movements desiring to bypass the central city. In addition, significant intra-area travel, such as between major business districts and outlying residential areas, between major inner city communities, or between major suburban centers should be served by this system. Frequently, the principal arterial system will carry important intra-urban as well as intercity bus routes. Finally, this system in small urban and urbanized areas should provide continuity for all rural arterials which intercept the urban boundary. Because of the nature of the travel, served by the principal arterial system, almost all fully and partially controlled access facilities will be part of this functional system. However, this system is not restricted to controlled access routes. The spacing of urban principal arterials will be closely related to the trip-end density characteristics of particular portions of the urban areas. The US Department of Transportation provides the guidance that 50-65 percent of the VMT should be accounted for on the principal arterial system.

**Project Delivery Report.** Government Code Section 14525.5 requires Caltrans to submit to the legislature by November 15 of each year a report on the delivery of all state highway projects in the adopted STIP which cost \$1M or more and for which the department is the responsible agency for project development work (including some, but not all locally funded projects). The report must identify milestone dates by month and year for these projects, and must summarize the number of projects which met milestones and identify those that failed to meet one or more milestones. For those that failed, the report must explain the reasons for the delay and present a plan to resolve any problems and a new schedule for delivery. The Plan must also include an estimate of Caltrans<sup>1</sup> capital outlay project development staffing needs for the next fiscal year in order to delivery the adopted STIP. The Report must also include a determination of the portion of project development work that will be performed by Caltrans and the portion that will be "contracted out." This Plan is then assessed by the Legislative Analyst in its annual analysis of the Governor's proposed budget.

**Project Study Report (PSR).** Chapter 878 of Statutes 1987 requires that any capacity increasing project on the state highway system, prior to programming the STEP, have a completed PSR. The PSR must include a detailed description of the project scope and estimated costs. The intent of this legislation was to improve the accuracy of the schedule and costs shown in the STEP, and thus improve the overall accuracy of the estimates of STEP delivery and costs.

**Proposed State Transportation Improvement Program (PSTIP).** This seven-year program is based on the adopted STEP and the most recent Project Delivery Report. It may include additional schedule changes and/or cost changes, plus new projects that Caltrans proposed for the interregional road system, retrofit soundwalls, and toll bridge and aeronautics programs, as well as the intercity rail program. Caltrans may also propose, under specified conditions, alternative FCR projects to those proposed in the RTEPs; this is the only overlap with the RTEPs. The PSTEP is due to the CTC on 12/1 of odd numbered years.

**Proposition 116.** Passed by voters in June of 1990, this initiative sponsored by the Planning and Conservation League provides \$1.99B in rail bonds, primarily to projects specified in the legislation. Guidelines for the implementation of the program were available in the Fall of 1990.

**Public Transit (Mass Transit).** Passenger transportation service, usually local in scope, that is available to any person who pays a prescribed fare. Operated on established schedules along designated routes or lines with specific stops and is designed to move relatively large numbers of people at one time. Examples include bus, ferry, light rail and rapid transit.

**Public Transportation.** Transportation service to the public on a regular basis using vehicles that transport more than one person for compensation, usually but not exclusively over a set route or routes from one fixed point to another. Routes and schedules may be determined through a cooperative arrangement. Subcategories include public transit service, and paratransit service that are available to the general public.

**Quadrennium.** A fixed four year period, over which county minimums are calculated. In each quinquennium, a county should receive at least its county minimum share of the total program. The first quinquennium ran from 1982/3 to 1987/88. The second encompasses 1988/89 through 1992/93. The third quinquennium starts in 1993/94 and ends in 1997/98; four of these years were programmed in the 1990 STIP. The fourth quinquennium (which will begin to be programmed in the 1992 STIP) includes 1998/99 through 2003/4.

**Regional Transportation Improvement Program (RTIP).** A list of proposed transportation projects submitted to the CTC by the regional transportation planning agency (for the Bay Area. MTC), as a request for state funding. The individual projects are first proposed by the CMAs, then evaluated and prioritized by the regional agency for submission to the CTC. The RTIP has a seven year planning horizon, and is updated every two years. MTC may only include projects in its RTIP that are first included in a CMP.

**Regional Transportation Plan (RTP).** A comprehensive 20-year plan for the region, updated every two years by the regional transportation planning agency (for the Bay Area. MTC). The RTP includes goals, objectives and policies, and recommends specific transportation improvements.

**Ridesharing.** Two or more persons traveling by any mode, including but not limited to, carpooling, vanpooling, taxipooling, jitney and public transit.

**Regional Traffic Signalization and Operations Program (RTSOP).** Administered by MTC, this program was created to fund traffic signalization projects that implement cost effective traffic control measures. The types of eligible projects include signal re-timing; upgrades of existing controllers to comply with AB 3418 and NTCIP; repair, replacement, installation, and improvement of hard-wire interconnect systems; and upgrade and improvements to traffic signal systems.

**Short Range Transit Plans (SRTP).** A seven-year comprehensive plan required by federal and regional transportation funding agencies of all transit operators. The plans must define the operator's mission, analyze its past and current performance, and plan specific operational and capital improvements to realize its short-term objectives.

**State Highway Operations and Protection Program (SHOPP)** [Formerly called the Highway System Operations and Protection Plan (HSOPP)]. A program created by state legislation that includes state highway safety and rehabilitation projects, seismic retrofit projects, land and buildings projects, landscaping, some operational improvements, bridge replacement, and the minor program. SHOPP is a four year program of projects, adopted separately from the STIP cycle. The June 1990 gas tax increase partially funds the program, but it is primarily funded through the "old" 9 cent gas tax and federal funds. For the purposes of the Fund Estimate, a formula based on a pavement index and safety concerns is used to estimate an additional 3 years of the SHOPP program.

**State Implementation Plan (SIP).** State plan required by the Federal Clean Air Act of 1990 to attain and maintain national ambient air quality standards. It is adopted by local air quality districts and the State Air Resources Board.

**State/Local Partnership.** Originally created by SB 140, and subsequently funded by the passage of Proposition 111 by the voters in June of 1990, the State/Local Partnership provides state matching funds for locally funded and constructed highway and exclusive public mass transit guideway projects. \$2 billion over ten years have been designated for this program. Eligible projects are defined by the legislation and clarified by guidelines published by the Caltrans Division of Local Streets and Roads. Applications are annually submitted to Caltrans (by June 30 for the following fiscal year), which administers the program. The amount of state match available in a given year is dependent upon the number of eligible applicants and the size of the appropriation to the program by the legislature during the budget process. The state match can not exceed 50 percent.

**State Transit Assistance (STA).** This program provides funding for transit and transportation planning. Fifty percent of the revenues transferred to the TP&D Account (see definition below) are appropriated to STA. STA apportionments to regional transportation planning agencies (MTC in the Bay Area) are determined by two formulas. 50 percent by populations and 50 percent by the amount of operator revenues (fares, sales tax, etc.) for the prior year. The Bay Area usually receives about 38 percent of the amount available for STA state-wide. STA funds may be used for transit capital or operating expenditures. Passage of Proposition 117 disallows use of STA funds for streets and roads in the non-urban counties.

**State Transportation Improvement Program (STIP).** A list of transportation projects, proposed in RTFFs and the PSTIP, which are approved for funding by the CTC.

**Traffic Systems Management (TSM) Program.** A state-funded program that funds those projects which "increase the number of person trips on the highway system in a peak period, without significantly increasing the design capacity of the system, measured by vehicle trips, and without increasing the number of through traffic lanes". This program is funded outside of the STIP process, through direct application to Caltrans. The CTC programs the projects from a prioritized list submitted by Caltrans. Statute requires that priority be given to projects from counties with adopted CMPs.

**Transit Capital Improvement Program (TCI).** A state program, currently funded primarily from the TP&D account (see definition below) for transit capital projects and the STA program (see definition above). An annual program, all state funds must be matched 50 percent by local funds.

**Transit Operators Coordinating Council (TOCC).** A statutorily created committee of MTC that consists of the General Managers of the major transit operators in the region. It meets monthly to discuss matters of mutual concern and to advise MTC.

**Transportation Control Measures (TCMs).** A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances, and the use of cleaner burning fuels in motor vehicles. MTC has adopted specific TCMs, in compliance with the Federal and State Clean Air Acts, that can be found in MTC Resolution No. 2131 and the Transportation Control Measure Plan for the State Clean Air Plan prepared by MTC in December 1994.

**Transportation Demand Management (TDM).** "Demand-based" techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of the peak hours.

**Transportation Improvement Program (TIP)-** A federally required document produced by the regional transportation planning agency (MTC in the Bay Area) that states the investment priorities for transit and transit-related improvements, mass transit guideways, general aviation and highways. The TIP is the MTC's principal means of implementing long-term planning objectives through specific projects.

**Transportation Management Association (TMA).** A consortium of business and industry (private sector) interests formed to help solve mutual transportation problems. A TMA is not in any form a publicly sponsored or coordinated agency or group.

**Transportation Planning and Development Account (TP&D).** A state account, funded by the sales tax on the new 9 cent gas tax and the diesel sales tax, that is the primary funding source for the TCI (see definition above) program.

**Transportation System Management (TSM).** A set of relatively low-cost techniques to relieve congestion without adding vehicle capacity to the transportation system. TSM techniques are numerous. Some are "demand-based" techniques such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of the peak hours. (Sometimes the demand-based strategies are referred to as TDM). Other TSM measures are engineering-oriented, such as timing traffic signals to smooth the flow of traffic, and ramp metering, which regulates the entrance of vehicles onto a freeway, increasing the efficiency of the freeway.

**Urban and Commuter Rail.** A state funding program financed by the sales and bonds authorized by Proposition 108. Two additional bond measures to fund this program were rejected by voters in 1992 and 1994. AH projects must be matched 50 percent by local funds. Projects are proposed through the CMP process to regional agencies, which then may include them in their RTIPs.

**Federal Transit Administration (FTA).** A division of the U.S. Department of Transportation, delegated by the Secretary of Transportation to administer the federal transit program under the Urban Mass Transportation Act of 1964, as amended, and various other statutes.

**FTA Section 3 Funds.** Discretionary transit capital fund provided by the federal government through FTA. New Rail Starts and Extensions are funded through this program, which operates through earmarking at the Congressional level. The Section 3 program is updated approximately every four years. The minimum local match is 20 percent, although larger local shares are encouraged.

**FTA Section 8 Funds.** Transit operating funds provided by the federal government through UMTA. Made available through Section 8 of the Urban Mass Transportation Act of 1972, Section 8 funds are available for planning components of the operating budget, only, such as development of Short Range TransitPlan.

**FTA Section 9 Capital Funds.** Capital funds provided by the Federal government through FTA. Section 9 capital funds are available to support capital purchases only. They must be matched with, local capital funds on an 80 percent federal. 20 percent local basis.

**FTA Section 9 Operating Funds.** Operating funds provided by the Federal government through FTA. Available only to support annual operating budgets. Capital purchases must be supported with other funds. The total amount of Section 9 operating funds is determined by Congress each year and is then divided among regions and operators within regions on a formula basis.

**FTA Section 16 (b) 2 Funds.** Funds provided by the federal government through FTA to private nonprofit providers of transportation for the elderly and handicapped. Program is administered annually in the Bay Area by MTC.

**FTA Section 18 Funds.** Transit funds provided by the federal government through FTA by formula to rural areas. Administered by Caltrans in California, these funds can be used for either capital or operating expenses. Capital projects require a 20 percent local match. Operating projects require a 50 percent local match.

**Urbanized Area.** As defined by the Bureau of the Census, a population concentration of at least 50,000 inhabitants, generally consisting of a central city and the surrounding, closely settled, contiguous territory (suburbs). The boundary is based primarily on a population density of 1,000 people/mile, but also includes some less densely settled areas, as well as such areas as industrial parks and railroad yards, if they are within areas of dense urban development. The boundaries of urbanized areas, the specific criteria used to determine urbanized areas, or both, may change in subsequent censuses.

**Vehicle Miles Traveled (VMT).** Travel demand forecasting (modeling) is used to generate the average trip lengths for a region. The average trip length measure can then be used in estimating vehicle miles of travel, which in turn is used in estimating gasoline usage or mobile source emissions of air pollutants.

**Vehicle Occupancy.** The number of people aboard a vehicle at a given time; also known as auto or automobile occupancy when the reference is to automobile travel only.

**Vehicle Trip.** A one-way movement of a vehicle between two points.